CLAIMS

What is claimed is:

1. A method of controlled delivery of analgesic through a patient's skin to a patient's systemic circulation comprising:

delivering an analgesic through the skin of patient at a delivery site on the skin;

applying a temperature modification apparatus proximate to the delivery site on the skin; and

heating said skin with the temperature modification apparatus.

2. A method of Claim 1, wherein said temperature modification apparatus comprises: a shallow chamber defined by a cover, a frame of air impermeable material, and a bottom;
a heat generating medium disposed within said chamber; and
means to affix said shallow chamber onto said human skin.

3. A method of Claim 2, wherein said means to affix said shallow chamber onto human skin comprises an adhesive disposed on said chamber such that said adhesive affixes said chamber to human skin, when said adhesive is in contact with human skin..

4. The method of Claim 2, wherein said temperature modification apparatus further comprises means to affix said shallow chamber to a dermal drug delivery system, said mans to affix to a dermal drug delivery system being an adhesive that has the characteristic of being less adhesive to the dermal drug delivery system than the means to affix to human skin is adhesive.

5. The method as claimed in Claim 2, wherein said heat generating medium comprises activated carbon and iron in a predetermined ratio.

6. The method as claimed in Claim 4, said heat generating medium further comprising sodium chloride and sawdust.

7. The method as claimed in Claim 1, wherein the temperature modification apparatus further comprises a substantially two-dimensional device comprising a resistor layer capable of generating heat when supplied with electricity, means to affix said substantially two-dimensional device, and means to supply electric currents to said resistor layer.

8. The method as claimed in Claim 7, wherein said means to supply electric current to said resistor layer comprises means to regulate the intensity of electric current supplied to said resistor layer.

9. The method as claimed in Claim 7, wherein the means to regulate the intensity of electric current is capable of regulating the intensity of electric current according to the temperature of said substantially two-dimensional device.

10. The method as claimed in Claim 9, wherein said means to regulate said intensity of said electric current comprises a thermistor.

11. The method as claimed in Claim 1, further comprising the step of discontinuing said heating of said skin when continuation of said heating would be injurious to the patient.

12. The method as claimed in Claim 1, wherein the step of said heating of said skin comprises discontinuing said heating when continuation of said heating would be injurious to the patient.

13. The method as claimed in Claim 1, wherein the step of said heating said skin includes heating said analgesic.

14. The method as claimed in Claim 1, wherein the step of heating further comprises heating a transdermal analgesic delivery system to a temperature of about between 38 and 45°C.

15. The method as claimed in Claim 1, further comprising the step of discontinuing said heating of said skin of said human body with said temperature modification apparatus at a time when a patient's break-through pain diminishes.

16. The method as claimed in Claim 1, wherein the temperature modification apparatus is capable of generating controlled heat, said controlled heat having a predetermined temperature range and a predetermined time duration.

17. The method as claimed in Claim 1, wherein said temperature is increased to about 60°C.

18. The method in Claim 1, wherein the temperature range is between about 38 to about 45°C.

19. The method as claimed in Claim 1, wherein the temperature range is about 39 to about 44°C.

20. The method of Claim 2, wherein said cover comprises an air impermeable material, said material defining a predetermined number of openings having a predetermined size.

21. The apparatus as claimed in Claim 2, wherein said cover comprises an air impermeable material defining at least one opening covered with a membrane, said membrane having a predetermined air permeability.

22. A drug delivery system comprising:

a transdermal drug patch for delivering an analgesic transdermally when said patch is applied to a patient's skin, and

a temperature control apparatus secured to said patch and said temperature control apparatus being capable of heating said patch and said patient's skin proximate said patch, when said patch is disposed on said patient's skin and when said temperature control apparatus is secured to said patch.